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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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December 20, 1989

Mr. Michael Gibson
Director, Environmental Affairs
Kennecott Minerals Company
P. O. Box 525
Bingham Canyon, Utah 84006-0525

Dear Mr. Gibson:

Re: Reclamation Discussion/Meeting, Bingham Canyon Mine, Kennecott Minerals,
M/035/002, Salt Lake County, Utah

This letter addresses my discussion with Mr. Bart Kale, of Kennecott, on December 5, 1989, dealing with reclamation planning at the Bingham Pit mine. Our discussion focused mainly on the older approved 1978 Bingham Pit permit.

As I discussed with Mr. Kale, this site was permitted under the old rules. I have enclosed a copy of the old rules, along with an older version of the statute, which also applies to the 1978 permit. Also, please find enclosed for your and Mr. Kale's perusal, some DOGM workshop handouts which address recent changes made to the Mined Land Reclamation Act and the associated rules. You will find two lists of other government agencies involved in various aspects of the mine permitting process. This material may be helpful with the upcoming amendment to your modernization project.

After my meeting with Mr. Kale, I later spoke with Wayne Hedberg and Lowell Braxton, of the Division. We decided that Kennecott should formally address the items discussed in our September 5, 1989 letter to Kennecott. Please let us know what steps Kennecott will take to resolve these questions.

It is my understanding, that there is no hesitancy, on Kennecott's part, in going forward with the execution of these items, with the exception of item 3. For the time being, item 5 will not be discussed further. As far as item 3 is concerned, the Division's position is to insist that Kennecott carry out some type of spoils/waste materials characterization, on existing dump materials. The specifics of such a study are negotiable. For example, it is my understanding that Mr. Paul Rokich may be able to identify certain mine waste areas that can be successfully reclaimed using appropriate plant mixtures. This approach would shortcut the longer and more expensive procedure of materials analyses and establishment of revegetation test plots, which are ordinarily performed before deciding upon the proper plant mixture and soil amendments to use.

It is the Division's position, regarding future waste dumping, that a procedure for characterizing deleterious waste/spoil material may need to be developed. If materials originating from the pit prove to be deleterious to plant establishment, this would necessitate a more deliberate dumping program. Such a selective waste dumping program may need to be initiated to accommodate more successful reclamation of the dumps. If Kennecott can prove that these types of dump materials are reclaimable, such a program would not be justified. One suggestion is that Kennecott initiate a large scale contemporaneous reclamation program, on the dumps no longer in service. If this program fails, the Division's fall back position would be to require that the waste characterization and selective dumping program be initiated.

With regard to those portions of the Kennecott mine site, which are currently being reclaimed (i.e. the Arthur and Magna processing sites and the Lark tailings site), the Division appreciates and accepts Kennecott's offer to keep us apprised of the progress at these sites. The Division's regulatory jurisdiction does not extend to those sites where mining operations ceased prior to July 1, 1977. These areas addressed in your 1976 Notice of Intent and affected subsequent to July 1, 1977, must be reclaimed in accordance with the Act and approved Mining and Reclamation Plan. Mr. Kale has agreed to inform the Division if this is the case for any of the sites currently in the process of reclamation, or reclamation planning.

It is the Division's interpretation, that Kennecott's 1978 Mining and Reclamation Plan was approved as a dynamic plan. Language in Kennecott's 1978 Reclamation Contract, commits the operator to experimentation with, and use of, the best

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available reclamation technology. At the time the agreement was made, it was not known what the exact limitations were, to reclaiming the mine site. The reclamation program was to evolve each year with input from both the operator and the Division, and the specific final reclamation details were to be developed as operations continued over the long term.

Thank you again for your willingness to address these concerns, and the steps you have taken thus far to resolve them.

Sincerely,

A handwritten signature in cursive script, appearing to read "Holland Shepherd".

Holland Shepherd
Permit Lead

jb
Enclosures
cc: Lowell Braxton
Wayne Hedberg
M035002.1